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| PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824 | | | JAMAL, ALEXANDER | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2643 | |

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/032,744

Applicant(s)

PALIN ET AL.

Examiner

Alexander Jamal

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10-26-2001
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. **Claims 1-4,6-9,11-13** objected to because of the following informalities:

As per **claim 1**, 'length of which back-off time' should be changed to 'length of said back-off time.'

As per **claim 2**, 'determining at least maximum number' should be changed to 'determining said maximum number'.

As per **claim 3**, 'said at least maximum number' should be changed to 'said maximum number', and 'which RSSI' should be changed to 'said RSSI'.

As per **claim 4**, 'wherein said maximum number is set the higher' should be changed to 'wherein the higher said maximum number is set'.

As per **claim 6**, 'determining at least said maximum number' should be changed to 'determining said maximum number', and 'wherein said number space is set the higher' should be changed to 'wherein the higher said number space is set'.

As per **claim 7**, 'determining at least said maximum number' should be changed to 'determining said maximum number'.

As per **claim 8**, 'said at least maximum number' should be changed to 'said maximum number', and 'which pathloss' should be changed to 'said pathloss'.

As per **claim 9**, 'wherein said maximum number is set the higher' should be changed to 'wherein the higher said maximum number is set'.

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As per **claim 11**, 'at least said maximum number' should be changed to 'said maximum number', and 'wherein said number space is set the higher' should be changed to 'wherein the higher said number space is set'.

As per **claim 12**, 'at least said maximum number' should be changed to 'said maximum number'.

As per **claim 13**, 'which list' should be changed to 'said list'. Additionally, the 'first device' stated in the last line of the claim should be changed to 'second device' as it is referring to the device which initially sends the inquiry message (which is the second device as per the second line of the claim).

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-7,14-18,20** rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's specification (pages 1-4), and further in view of Marsan (6564068) and further in view of Chuah et al. (6400695).

As per **claim 1**, applicant's spec (BACKGROUND pages 1-4) discloses a wireless bluetooth system in which a second unit sends an inquiry to a first unit, and the

first unit receives the message twice with a backoff time (which is, by definition, a randomly selected value within a defined number space) in between before it responds to the second device. The first device scans for inquiry messages, and scans again after a back-off time. However, applicant's spec does not disclose the first unit measuring a received signal power level indication, and using that value to vary the range of the backoff number space.

Applicant's spec discloses that it is likely that the two devices closest to each other form the right pair of devices (Page 4 paragraph 2). Marsan discloses a wireless networking system in which multiple devices (mobile terminals and base stations) may be configured to communicate with each other depending on signal strength (MARSAN: Col 3 line 35 to Col 4 line 30). Marsan teaches that a signal strength indication (RSSI) may be used to assign priorities to a number of possible network connections (to various base stations) when service is requested. Since the two closest networking devices would have the strongest signal level, it would have been obvious to one of ordinary skill in the art at the time of this application to use the RSSI indication to assign priorities to all possible terminal connections when attempting to connect to a network for the advantage of allowing for a higher probability of connected to the correct device (and decreasing setup time).

Chuah et al. discloses a shared access wireless networking system in which the remote units utilize a backoff delay that is dependant upon the priority of the access requests (Col 10 lines 5-35,52-67). It would have been obvious to one of ordinary skill in the art at the time of this application to use the signal strength to assign priorities (as

taught by Marsan) to units attempting to connect in a Bluetooth network being used in M-commerce (as disclosed by applicant's spec) and to vary the backoff delay based upon the priorities (and as such, the signal strength) as taught by Chuah for the advantage of reducing the setup time of the devices (CHUAH: Col 10 lines 63-67).

As per **claim 14**, claim rejected for same reasons as claim 1 rejection.

As per **claim 17**, claim rejected for same reasons as claim 14 rejection.

As per **claim 2**, Chuah discloses that the backoff delay number space is defined by a maximum and minimum number (Col 10 lines 29-35).

As per **claim 3**, Marsan discloses that the signal power is indicated by the RSSI (Col 4 lines 15-20).

As per **claims 4,6,15,18**, Marsan discloses that the hlower the RSSI is for a unit, the lower the priority is for that unit (MARSAN: Col 4 lines 5-20). Chuah discloses that the lower the priority, the higher the priority number and as such, the higher the maximum value for the number space is set (CHUAH: Col 10 lines 25-35).

As per **claim 5**, Marsan discloses that the range of RSSI values below a threshold would assign a common priority level (the lowest) (Marsan: Col 4 lines 5-15), which would be assigned a common maximum value as taught by Chuah.

As per **claim 7**, claim rejected for same reasons as claim 4,5 rejections.

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As per **claims 16,20**, applicant's specification (background) discloses a Bluetooth system.

4. **Claims 8-12,19** rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's specification (pages 1-4), in view of Marsan (6564068) in view of Chuah et al. (6400695) as applied to claims 1,17.

As per **claim 8**, applicant's spec in view of Marsan in view of Chuah discloses applicant's claim 1 and the fact that RSSI measurements are made to assign a priority to possible nodes on the network. However, they do not specify that the pathloss be used in assigning the priority (and as such, the backoff delay number space).

Marsan discloses that the RSSI is used to assign priority. It would have been obvious to one of ordinary skill in the art at the time of this application that any parameter relating to the signal quality or signal strength (such as pathloss) could be used for the purpose of providing the various nodes with a ranking based upon the quality of the received signal.

As per **claim 9,11** claim rejected for same reasons as claim 4 rejection.

As per **claim 10**, claim rejected for same reasons as claim 5 rejection.

As per **claim 12**, claim rejected for same reasons as claim 9,10 rejections.

As per **claim 19**, applicant's spec in view of Marsan in view of Chuah discloses applicant's claim 17. However, they do not specify that a unit without the capability of measuring received power levels use a backoff value selected from a fixed number space.

Additionally, applicant's background discloses bluetooth devices that respond to inquiries by using a backoff value selected from a fixed number space (SPECIFICATION: page 3) in order to reduce collisions. It would have been obvious to one of ordinary skill in the art at the time of this application that any network devices without the additional capability to measure signal power would implement a backoff procedure using a fixed number space for the advantage of reducing possible collisions in the network during the inquiry process.

5. **Claim 13** rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's specification (pages 1-4), in view of Marsan (6564068) in view of Chuah et al. (6400695) as applied to claim 1, and further in view of Blatherwick et al. (6269395).

As per **claim 13**, applicant's spec in view of Marsan in view of Chuah discloses applicant's claim 1. However, they do not disclose that the second device (the one sending the inquiry) comprises a display, or that the display includes a listing of device that have responded to the inquiry message of the second device.

Blatherwick discloses a terminal device used in a network with the device comprising a display (ABSTRACT, Col 5 lines 49-65). The display may display a list of

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devices that have responded to inquiries (access points and services) (Col 13 lines 20-50).

The services and access points may be listed in the order they were most recently accessed (Col 13 lines 53-62). It would have been obvious to one of ordinary skill in the art at the time of this application that the devices could comprise means to display listings of access points (other network devices) to the device sending out inquiries for the purpose of enabling the user to be able to view, select and configure options pertaining to the various access points.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Jamal whose telephone number is 703-305-3433. The examiner can normally be reached on M-F 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis A Kuntz can be reached on 703-305-4708. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9315 for After Final communications.

AJ
February 18, 2005


CURTIS KUNTZ
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